United States Environmental Protection Agency Region 10

Lower Duwamish Waterway Superfund Site Draft Feasibility Study

Seattle, Washington

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The mud in the Duwamish is contaminated. Government agencies are thinking about the best way to clean it. The goal is to make the Duwamish safer for people and animals.

The draft Feasibility Study describes what the cleanup could look like using different combinations of technologies.

- The cleanup will affect where you live, work, and play.
- Your ideas are important. Your government agencies want to know what you think so they can develop a good cleanup plan. The Feasibility Study is available for public review. Send your comments to the Environmental Protection Agency (EPA) by January 14, 2011.
- EPA will consider your comments as it develops a cleanup recommendation. You will be invited to comment on that recommendation in early 2012. The current public comment period is one of many opportunities to share your ideas to the government agencies.

Why is the Duwamish polluted?

- For over a hundred years, pollution flowed into the Duwamish. Much of it settled in the mud.
- The pollution came from industry, stormwater, and sewage.

What are the risks to people and animals?

• The biggest risk to people is from eating fish, shellfish, and crabs that live in the Duwamish all year. The fish, shellfish and crabs collect contaminants from the mud in their bodies and are not safe to eat.

- Salmon are safer to eat. You can safely eat 2-3 meals a week of chum, coho, pink and sockeye salmon. Limit Chinook salmon to one meal a week. Salmon do not spend much time in the Duwamish so they do not have as much contamination as fish that live all year in the Duwamish. Visit the Department of Health's web site for information about which fish are safe to eat and which should be avoided.
- Public access areas, including Duwamish Waterway Park, are cleaner than industrial areas. You can safely touch the mud and play in these areas. Even so, please wash your hands afterwards, especially before you eat. Wash your children's hands, toys, and pacifiers often.
- The mud around industrial areas is contaminated and should be avoided. If you come in contact with mud in industrial areas, wash your hands.
- It is safe to swim in the Duwamish, except during and after heavy rains, when sewage can get in the river.

How do we clean up the Duwamish?

- We need to use a combination of methods –
 there is not one method that is effective for all
 parts of the Duwamish.
- Each method has strengths and weaknesses.
 We need to figure out which combination is the most desirable.
- We will continue to work on preventing new contamination from entering the Duwamish.

Continued → Next Page

How will cleanup work?

- The very worst areas in the Duwamish have been identified. The worst areas are being cleaned up first. These are called Early Action Areas. They include T117, Slip 4 and Boeing Plant 2.
- For the rest of the waterway, 3 methods will be combined to do the clean up. Those methods are: natural recovery, capping, dredging. Natural recovery relies on clean mud coming from the Green River to cover the contaminated mud over time. Capping puts a thick layer of clean materials on top of the contaminated mud. Dredging takes contaminated mud out of the river.
- Each cleanup option in the Feasibility Study uses different combinations of methods to reach cleanup goals. Depending on which option is chosen, construction equipment could be in the river for 4 to 38 years. It could cost between \$220 million and \$1.3 billion. There could be more noise and traffic from construction with some options.

How do the options compare?

- All of the options will reduce contamination and make the Duwamish safer for people and animals. At the end of the cleanup, the Duwamish could be 90% cleaner than it is today. However, the fish and shellfish still will not be completely safe to eat. To make the fish safe, we would have to clean up the Duwamish and surrounding areas to the same level as a remote, natural area.
- The results of dredging are most certain (you know the contamination is gone). But dredging costs more and takes longer than capping.
- Capping is less disruptive and faster than dredging. The cap must be checked to make sure it continues to work well.
- Natural recovery may cost the least if it works well but the mud will need to be checked often to make sure the contamination stays covered. The cleanup results with this method are the least certain.

Do you have questions or an opinion about the cleanup?

- Send an e-mail to the Environmental Protection Agency at:
 r10Lowerduwamish@epa.gov or call Renee Dagseth at (206) 553-1889. Visit the websites: www.epa.gov/region10/duwamish.html and www.ecy.wa.gov/programs/tcp/sites/lower_duwamish/lower_duwamish_hp.html
- See the feasibility study and make comments at **www.ldwg.org**, the website of the Lower Duwamish Waterway Group.
- Contact the Duwamish River Cleanup Coalition - the Citizen's Advisory Group for the site.
 - www.duwamishcleanup.org or (206) 954-0218
 - Contact the Environmental Coalition of South Seattle (ECOSS): (206)767-0432 or e-mail **info@ecoss.org**ECOSS is a business and multi-lingual resource.



